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CARLSON GASKEY & OLDS
INTELLECTUAL PROPERTY DEPARTMENT
400 W MAPLE STE 350
BIRMINGHAM, MI 48009

EXAMINER	
KRUER, STEFAN	

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD FARGO and
RICHARD L. HOLLOWELL

Appeal 2009-013688
Application 10/564,873
Technology Center 3600

Before: JENNIFER D. BAHR, LINDA E. HORNER, and FRED A. SILVERBERG, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-7, 9, and 12 under 35 U.S.C. § 102(b) as being anticipated by Fuller '945 (US 5,750,945, iss. May 12, 1998); claims 8, 17, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Fuller '945 and Fuller '824 (US 6,216,824 B1, iss. Apr. 17, 2001); claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Fuller '945 and O'Donnell (US 6,123,176, iss. Sep. 26, 2000); and claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Fuller '945 and Wagatsuma (US 6,234,276 B1, iss. May 22, 2001). Appellants have canceled claims 13-16, 18, and 20. Amdt. filed Jul. 23, 2009. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We REVERSE.

THE INVENTION

Appellants' invention is directed to a shock absorbing hitch for controlling the tension on a load bearing member in an elevator system. Spec. 1:4-6. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An elevator system, comprising:

a car;

a counterweight;

a load bearing member supporting the car and the counterweight such that the car moves in one direction and the counterweight moves in an opposite direction; and

a termination associated with at least one end of the load bearing member, at least a portion of the termination moving

> against a first bias of the termination responsive to a tension on the load bearing member that is below a selected threshold and moving against a second, passive bias of the termination responsive to a tension that exceeds the threshold.

OPINION

Claims 1-7, 9, and 12

Independent claim 1 requires, in relevant part, "at least a portion of the termination moving against a first bias of the termination responsive to a tension on the load bearing member that is below a selected threshold and moving against a second, passive bias of the termination responsive to a tension that exceeds the threshold."

The Examiner's position that Fuller '945 satisfies the aforementioned requirements of claim 1 appears to be based on a finding that the spring elements 52 of the hitch assembly shown in figure 3 will begin to compress under a lower force from tension on the load bearing member (ropes 14) than that required to result in any compression of the spring elements 54, and that spring elements 54 will compress in response to a greater tension force on the ropes. *See* Ans. 4, 9. Appellants argue that there is nothing in Fuller '945 that supports the Examiner's finding. App. Br. 5-6; Reply Br. 1. We agree with Appellants.

Appellants ensure that the springs 62 must be fully compressed by tension on the load bearing members 26 before the support member 60 begins to move against the bias of the springs 70 responsive to increased tension on the load bearing members 26 (despite the fact that the springs 70 are less stiff than springs 62) by applying an appropriate preload to the springs 70. Spec. 5:19-23. Fuller '945 contains no similar disclosure

discussing the relative stiffness or any preloading of the spring elements 52 and 54, and the Examiner has not articulated any technical basis to support a conclusion that the spring elements 52 will begin to compress at a lower force than spring elements 54. Further, the Examiner has not addressed what impact, if any, the active elements 56 of Fuller '945 will have on the spring elements 52 and 54. *See* Fuller '945, col. 4, ll. 53-55 (noting the passive hitch spring elements 54 provide partial support for the elevator so the active elements need not support the static load of the elevator car) and col. 7, ll. 17-23 (noting the position of active elements 56 may be frozen under certain loading conditions); Reply Br. 1-2.

Accordingly, we reverse the Examiner's rejection of claim 1 and of claims 2-7, 9, and 12, which depend from claim 1.

Claims 8, 10, and 11

The Examiner does not rely on Fuller '824, O'Donnell, or Wagatsuma for any teaching, or articulate any reason why it would have been obvious to modify Fuller '945, to make up for the deficiency of Fuller '945 discussed above. Thus, we reverse the rejection of claims 8, 10, and 11, which depend from claim 1.

Claim 17

Independent claim 17 recites, in relevant part, that "the terminating member is moveable relative to the guide structure responsive to a first force that opposes the bias of the first biasing member and the support member is moveable with the terminating member against the bias of the second biasing member responsive to a second, greater force."

Appellants argue that the Examiner "does not expressly explain how the limitations of claim 17 are found in the proposed combination" of Fuller '945 and Fuller '824. App. Br. 7. Appellants' argument is well taken. In

articulating the rejection of claim 17, and in responding to Appellants' arguments, the Examiner addresses the guide structure feature. Ans. 6, 10. However, the Examiner does not specifically explain how the combination of Fuller '945 and Fuller '824 renders obvious a hitch device in which the terminating member is movable relative to the guide structure responsive to a first force that opposes the bias of the first biasing member (which biases one end of the terminating member away from the support member) and the support member is moveable with the terminating member against the bias of the second biasing member (which biases the support member away from a selected stationary surface) responsive to a second, greater force, as called for in claim 17. As discussed above with respect to the rejection of claim 1, Fuller '945 contains no disclosure discussing the relative stiffness and/or preloading on the spring elements 52 and 54. The Examiner has not articulated any technical basis to support a conclusion that the spring elements 52 and 54 will function in the manner called for in claim 17, nor articulated any reason why it would have been obvious to modify Fuller '945 to result in such an arrangement.

For the above reason, we reverse the rejection of claim 17.

Claim 19

Claim 19 requires, in relevant part, that the first biasing member (which biases the terminating member away from the support member) have a first stiffness and the second biasing member (which biases the support member away from a selected stationary surface) have a second, lower stiffness.

The Examiner acknowledges that Fuller '945 is silent with respect to the preloading or stiffness of the biasing members. Ans. 7. In attempting to make up for this deficiency in Fuller '945, the Examiner relies on the

teaching in Fuller '824 of providing a gas spring that is "relatively 'soft'" and may have a spring constant less than half that of rope 14 (col. 5, ll. 28-35 and 55-56) in order to dampen relatively low frequency. Ans. 7. The teachings alluded to by the Examiner are silent with respect to the stiffness of such gas spring relative to the spring elements 52 of Fuller '945 or Fuller '824. Thus, it is not apparent, and the Examiner has not adequately explained, how these teachings of Fuller '824 in combination with the teachings of Fuller '945 would have prompted a person of ordinary skill in the art to provide the hitch of Fuller '945 with a second biasing member having a lower stiffness than that of the first biasing member. We reverse the rejection.

DECISION

For the above reasons, the Examiner's decision is reversed.

REVERSED

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